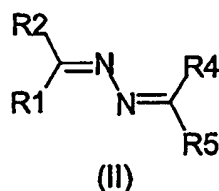
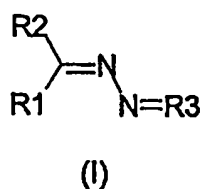


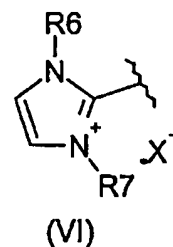
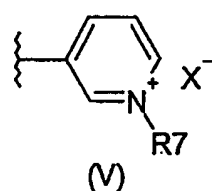
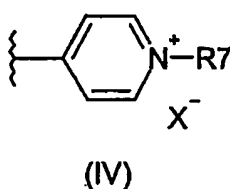
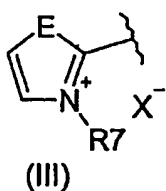
# CLAIMS

1. Cationic heteroarylazine dyes of general formulas (I) and (II)



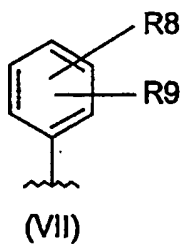
wherein

**R1** stands for a group of formula (III), (IV), (V) or (VI);

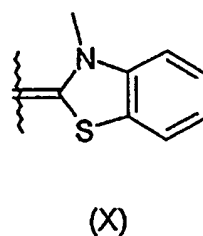
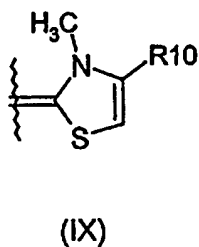
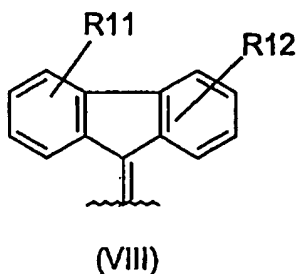


**E** stands for an oxygen atom or a sulfur atom;

**R2**, **R4** and **R5** can be equal or different and stand for hydrogen, a tert.butyl group, an isopropyl group, a C<sub>1</sub>-C<sub>6</sub>-alkyl group, a C<sub>1</sub>-C<sub>6</sub>-hydroxyalkyl group or a group of general formula (VII);



**R3** stands for a group of formula (VIII), (IX) or (X)



5 **R6** stands for hydrogen, a straight-chain or branched C<sub>1</sub>-C<sub>6</sub>-alkyl group or a straight-chain or branched C<sub>2</sub>-C<sub>4</sub>-hydroxyalkyl group;

**R7** stands for a branched or linear C<sub>1</sub>-C<sub>6</sub>-alkyl group, a C<sub>2</sub>-C<sub>4</sub>-hydroxyalkyl group or a C<sub>4</sub>-C<sub>6</sub>-polyhydroxyalkyl group;

10 **R8** and **R9** can be equal or different and stand for hydrogen, a C<sub>1</sub>-C<sub>6</sub>-alkylamino group, a C<sub>1</sub>-C<sub>6</sub>-N,N-dialkylamino group, a C<sub>1</sub>-C<sub>6</sub>-N,N-dihydroxyalkylamino group, a C<sub>1</sub>-C<sub>6</sub>-N-hydroxyalkyl-N-alkylamino group, a C<sub>1</sub>-C<sub>6</sub>-alkylcyano group, a methoxymethyl group, a tert.butyl group, an isopropyl group, a C<sub>1</sub>-C<sub>6</sub>-alkyl group, a C<sub>1</sub>-C<sub>6</sub>-alkyloxy group or a C<sub>1</sub>-C<sub>6</sub>-hydroxyalkyl group;

15 **R10** stands for hydrogen, a straight-chain or branched C<sub>1</sub>-C<sub>6</sub>-alkyl group or a straight-chain or branched C<sub>2</sub>-C<sub>4</sub>-hydroxyalkyl group;

**R11** and **R12** can be equal or different and stand for hydrogen, a C<sub>1</sub>-C<sub>6</sub>-alkylamino group, a C<sub>1</sub>-C<sub>6</sub>-N,N-dialkylamino group, a C<sub>1</sub>-C<sub>6</sub>-N,N-dihydroxyalkylamino group, a C<sub>1</sub>-C<sub>6</sub>-N-hydroxyalkyl-N-alkylamino group, a C<sub>1</sub>-C<sub>6</sub>-alkylcyano group, a methoxymethyl group, a tert.-butyl group, an isopropyl group, a C<sub>1</sub>-C<sub>6</sub>-alkyl group, a C<sub>1</sub>-C<sub>6</sub>-alkyloxy group or a C<sub>1</sub>-C<sub>6</sub>-hydroxyalkyl group; and

**X<sup>-</sup>** stands for an anion.

2. Cationic heteroarylazine dyes as defined in claim 1, characterized in that the anion is a sulfate anion, phosphate anion, hydrogen phosphate anion, oxalate anion, formate anion, acetate anion, citrate anion, tartrate anion, malonate anion, pyruvate anion, iodide anion, chloride anion, bromide anion or methylsulfate anion

3. Cationic heteroarylazine dyes as defined in claim 1 or 2, characterized in that they

are selected from among 1-(2-hydroxyethyl)-3-[(Z)-[(2E)-2-(3-methyl-1,3-benzothiazol-2(3H)-ylidene)hydrazono]methyl]pyridinium bromide, 4-[(E)-[(2Z))-2-(3,4-dimethyl-1,3-thiazol-2(3H)-ylidene)hydrazono]methyl]-1-(2-hydroxyethyl)pyridinium bromide, 2-[(E)-[(2Z)-2-(3,4-dimethyl-1,3-thiazol-2(3H)-ylidene)hydrazono]methyl-3-(methyl)-1-methyl-1H-imidazol-3-ium methylsulfate, 3-(2-hydroxyethyl)-1-methyl-2-[(Z)-[(2E)-2-(3-methyl-1,3-benzothiazol-2(3H)-ylidene)hydrazono]methyl]-1H-imidazol-3-ium bromide, 1-(2-hydroxyethyl)-4-[(Z)-[(2E)-2-(3-methyl-1,3-benzothiazol-2(3H)-ylidene)hydrazono]methyl]pyridinium bromide, 4-[(E)-({bis[4-(dimethylamino)phenyl]methylene}hydrazono)methyl]-1-(2-hydroxyethyl)pyridinium bromide, 4-[(E)-({bis[4-dimethylamino)phenyl]methylene}hydrazono)methyl]-1-(2-hydroxyethyl)quinolinium bromide, 4-[(E)-({bis[4-(dimethylamino)phenyl]methylene}hydrazono)methyl]-1-methylpyridinium methylsulfate, 4-[(E)-({bis[4-(diethylamino)phenyl]methylene}hydrazono)methyl]-1-methylpyridinium methylsulfate, 4-[(E)-(9H)-fluoren-9-ylidenehydrazono)methyl]-1-methylpyridinium methylsulfate, 3-[(E)-({bis[4-(dimethylamino)phenyl]methylene}hydrazono)methyl]-1-methylpyridinium methylsulfate, 4-[(E)-[(2Z)-2-(3,4-dimethyl-1,3-thiazol-2(3H)-ylidene)hydrazono]methyl]-1-methylpyridinium methylsulfate and 4-[(E)-({bis[4-(dimethylamino)phenyl]methylenidene}hydrazono)methyl]-1-methylquinolinium methylsulfate.

4. Agent for non-oxidative dyeing of keratin fibers, characterized in that it contains a cationic heteroarylazine dye as defined in one of claims 1 to 3.

5. Agent as defined in claim 4, characterized in that it contains at least one natural polymer, synthetic polymer or modified polymer of natural origin commonly used in cosmetic agents and that it is in the form of a tinting setting agent or color setting agent.

6. Agent for the simultaneous brightening and dyeing of keratin fibers, characterized in that it contains (a) an oxidant and (b) at least one cationic heteroarylazine dye as defined in one of claims 1 to 3.

7. Agent as defined in claim 6, characterized in that the oxidant is selected from among hydrogen peroxide, persulfates, perborates and mixtures of these compounds.

8. Agent for the oxidative dyeing of keratin fibers based on oxidation dye precursors,

characterized in that it contains at least one cationic heteroarylazine dye as defined in one of claims 1 to 3.

9. Agent as defined in claim 8, characterized in that it contains from 0.01 to 12 weight percent of at least one oxidation dye precursor.

10. Agent as defined in one of claims 4 to 9, characterized in that it contains the cationic heteroarylazine dye as defined in one of claims 1 to 3 in a total amount from 0.01 to 10 weight percent.

11. Agent as defined in one of claims 4 to 10, characterized in that it is a hair colorant.